

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Noel MCDONALD, et al.

Attorney Docket No. Q67567

Appln. No.: Not yet assigned

Confirmation No.: Not yet assigned

Group Art Unit: Not yet assigned

Filed: December 06, 2001

Examiner: Not yet assigned

For: PHASE SHIFTER

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to examination, please amend the above-identified application as follows:

IN THE CLAIMS:

Please enter the following amended claims:

5. (Amended) A phase shifter element as claimed in claim 1, wherein said optimisation means comprises a radio frequency analysis and optimisation computer program to calculate data for controlling cutting equipment means to produce said dielectric segments having optimum dimensions and optimum widths there between.

6. (Amended) A phase shifter element as claimed in claim 1, wherein said planar dielectric member comprises a rectangular body section, said dielectric segments extending from a major side thereof, and wherein the segments and the body section lie in the same plane.

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7. (Amended)A phase shifter element as claimed in claim 1, wherein said transmission line is operatively associated with an antenna array.
11. (Amended)A phase shifter as claimed in claim 8, including adjustment means for selectively moving said dielectric element in relation to said transmission line such that said segments and said gaps movably overlap said transmission line to vary the phase of signals passing through said transmission line.
13. (Amended)An antenna array incorporating a phase shifter as claimed in claim 1.

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REMARKS

Entry and consideration of this Amendment is respectfully requested.

Respectfully submitted,



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Date: December 6, 2001

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

5. (Amended) A phase shifter element as claimed in ~~any one of the preceding~~ claims claim 1, wherein said optimisation means comprises a radio frequency analysis and optimisation computer program to calculate data for controlling cutting equipment means to produce said dielectric segments having optimum dimensions and optimum widths there between.

6. (Amended) A phase shifter element as claimed in ~~any one of the preceding~~ claims claim 1, wherein said planar dielectric member comprises a rectangular body section, said dielectric segments extending from a major side thereof, and wherein the segments and the body section lie in the same plane.

7. (Amended) A phase shifter element as claimed ~~any one of the preceding claims in~~ claim 1, wherein said transmission line is operatively associated with an antenna array.

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11. (Amended)A phase shifter as claimed in ~~any one of claims 8 to 10~~claim 8,
including adjustment means for selectively moving said dielectric element in relation to said
transmission line such that said segments and said gaps movably overlap said transmission line
to vary the phase of signals passing through said transmission line.

13. (Amended)An antenna array incorporating a phase shifter as claimed in ~~any one~~
~~of the preceding claims~~claim 1.